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UNITED STATES DEPARTMENT OF AGRICULTURE
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COST OF PRODUCTION OF TOMATOES

Data from Studies in 20 States
Selected Years, 1913-34



Compiled from Official Sources by
H. W. Hawthorne, Agricultural Economist

Washington, D. C.
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GENERAL STATEMENT

The following pages present certain data pertaining to the cost of production of tomatoes, as obtained in cost studies by Federal and State agencies in various parts of the United States from 1913 to 1934 inclusive. The data herein presented, in most instances, are either directly from Federal or State publications, or they are computed from data contained therein. The sources of information are listed in the footnotes under each table and the entire list is

1/ Acknowledgment is made of assistance in assembling the data for these pages, by Minnie B. Newcomer, Dorothy R. Owen, Myrtle E. Stephenson, Ethel Vance and Grace Weed, Assistant Clerks, Bureau of Agricultural Economics.

arranged alphabetically by States on pages 42 and 43. These sources should be consulted for explanation and further details.

Variability in the character of the information given in literature renders it impossible to present data for all of the items listed in these pages. Dollar figures and yields only are given in some instances, the quantitative labor, power and material requirements being omitted. Varied combinations of data occur in different studies which render a uniform "set-up" of tables impracticable in the following pages. Blank spaces (-) are of frequent occurrence, throughout the tables, indicating in general that the information is not available, but in some cases apparently a charge had been incurred and included with another item.

Care has been exercised that the "total cost" figures include growing and harvesting costs and those incurred by the producer in the preparation of the commodity for market, together with a charge for the use of the land, and for the interest on equipment. Variations from this conception of costs no doubt occur in some of the sets of data. Perhaps some minor items are occasionally omitted from the "total-cost" as given. Although major exceptions which have been noted in the sources of data have been pointed out, strict comparability of all sets of data in the following pages is not assumed, and responsibility is limited to the correctness of the citations.

Apparent discrepancies between the cost per acre and the cost per unit of yield in these pages are usually due to the fact that yield-per-acre figures were not carried out so far as in the source of data.

Incompleteness in the list of studies of cost of tomato production which have been made is hereby acknowledged.

In the several sources of data tomato production is usually designated as for manufacture, for canning, canning house tomatoes, etc.; or, as for market, fresh tomatoes, etc. In these pages the term "for manufacture" and "for market" have been used to designate the two groups respectively.

ACREAGE, PRODUCTION AND YIELD

The acreage used in the commercial production of tomatoes in the United States is around one-half a million acres. It averaged 466,490 acres for the five years, 1928-32 and totaled 514,040 acres in 1934. The production on approximately two-thirds of the acreage was utilized for manufacture and that on one-third of the acreage, for market.

Indiana, California, New Jersey, Maryland, Florida and Texas had more than one-half of the total commercial tomato acreage in 1928-32. Florida, Texas and California had more than one-half of the acreage used in the production of tomatoes for market; and Indiana, Maryland, California and New Jersey more than one-half of the acreage, for manufacture. Tables 1 and 2.

The states for which cost data are shown in the following pages had more than 80 percent of the total United States commercial tomato acreage, 1923-32.

Table 1. - Tomatoes for market, commercial crop: Acreage, production and yield per acre, by States; average, 1928-32

State	Acreage	Productio	Yield per acre <u>1/</u>
	Acres	1,000 bushels <u>2/</u>	Bushels <u>2/</u>
Florida	29,950	2,514	84
Texas	29,120	2,602	89
California	20,340	2,133	105
Mississippi	10,270	1,309	127
New Jersey	9,760	1,856	190
Tennessee	8,320	964	116
Indiana	5,770	685	119
Missouri	4,960	535	108
Illinois	4,350	374	86
New York	3,090	671	217
Arkansas	2,940	<u>3/</u> 232	79
Virginia	2,590	<u>3/</u> 349	135
South Carolina	2,510	209	83
Maryland	2,500	305	122
Ohio	2,170	384	177
Kentucky	1,880	177	94
North Carolina	<u>4/</u> 1,480	<u>4/</u> 65	<u>4/</u> 44
Louisiana	1,420	136	96
Washington	1,390	347	250
Colorado	1,310	<u>3/</u> 369	282
Georgia	1,230	<u>3/</u> 89	72
Michigan	1,130	184	163
Utah	770	111	144
Oregon	550	131	238
Pennsylvania	520	91	175
Iowa	460	55	120
Delaware	180	27	150
Total all States	150,660	<u>3/</u> 16,391	112

Data from U. S. Dept. Agr. Bureau of Agricultural Economics. Unpublished data.

1/ Column 2 divided by column 1.

2/ Bushels of approximately 53 pounds.

3/ Includes some quantities not harvested on account of market conditions, Georgia-- 75,000 bushels in 1930; Arkansas-- 41,000 in 1928, 98,000 in 1931, 50,000 in 1932; Virginia-- 70,000 in 1931; Colorado-- 76,000 in 1932.

4/ Short-time average.

Table 2. - Tomatoes for manufacture, commercial crop: Acreage, production and yield per acre, by States; average 1928-32

State	Acreage	Production	Yield ^{1/} per acre
	Acres	Short tons	Short tons
Indiana	62,940	247,200	3.9
Maryland	39,780	139,300	3.5
California	35,340	198,100	5.6
New Jersey	33,800	181,900	5.4
Arkansas	21,000	47,800	2.3
Missouri	20,310	43,400	2.1
Virginia	16,180	44,800	2.8
Delaware	12,680	43,600	3.4
New York	12,620	83,200	6.6
Ohio	10,670	60,400	5.7
Tennessee	10,500	22,600	2.2
Kentucky	6,110	16,300	2.7
Utah	5,850	20,900	3.7
Iowa	5,500	21,600	3.9
Illinois	5,420	19,700	3.6
Pennsylvania	4,740	18,000	3.8
Colorado	2,130	15,300	7.2
Michigan	2,030	11,500	5.7
Other States ^{2/}	8,230	27,400	3.3
Total all States	315,830	1,293,000	4.1

Data from U. S. Dept. Agr. Yearbook 1935, Table No. 259.

^{1/} Column 2 divided by column 1.^{2/} Other states include Connecticut, Florida, Georgia, Idaho, Kansas, Louisiana, Mississippi, Nebraska, New Mexico, North Carolina, Oklahoma, Oregon, South Carolina, Texas, Washington, West Virginia and Wisconsin.

TOMATOES: Cost data - Arkansas

Table 3. - Tomatoes for manufacture, northwestern Arkansas.

Item	1921	1927	
		Gravelly loam district	Silt and sandy loam district
	Number	Number	Number
Records	-	30	40
Acres per record	-	-	-
	Dollars	Dollars	Dollars
Cost per acre:			
Use of land -			
Interest	-	3.00	4.20
Taxes	-	.56	.56
Labor - 1/			
Preparing seed bed	-	8.35	6.31
Planting	-	2.37	1.90
Applying fertilizer	-	1.00	1.02
Cultivating	-	7.17	5.41
Picking	-	7.85	5.12
Hauling	-	3.92	2.90
Use of equipment (depreciation)	-	.87	1.10
Seed and plants	-	.28	.61
Fertilizer	-	4.25	4.36
Interest on equipment	-	.70	.88
Total cost	-	40.32	34.37
Returns per acre 2/	-	49.64	31.90
Yield per acre tons	5.0	3.89	2.50
Cost per ton 3/ dollars	-	11.27	16.24
Requirements per acre:			
Man labor hours	131	128	91
Horse work hours	82	106	85
Plants number	3400-3600	-	-
Fertilizer pounds	150-200	-	-
Labor and power requirements per acre, by operations:	Hours	Hours	Hours
Preparing, fertilizing, planting -			
Man labor	28	46.6	37.7
Horse work	28	52.6	39.6
Cultivating -			
Man labor	13	29.4	18.8
Horse work	19	30.7	28.8
Hoeing -			
Man labor	14	-	-
Spraying -			
Man labor	2	-	-
Horse work	1	-	-
Picking -			
Man labor	57	39.2	25.6
Hauling -			
Man labor	17	12.3	9.2
Horse work	34	23.0	16.8

Data for 1921 from U. S. Dept. Agr. Bull. 1181; for 1927 from Ark. Agr. Expt. Sta. Bull. 225.

1/ Includes power. 2/ Based on U. S. Dept. Agr. Crops and Markets report on prices paid growers in Arkansas, 1927. 3/ Costs per ton when total cost is divided by yield is \$10.37 in the gravelly loam district and \$13.75 in the

TOMATOES: Cost data - California

Table 4. - General estimates, 1915-16 and 1918-19 1/

Item		1915-16	1918-19
		Dollars	Dollars
Market prices for land, per acre:			
Best land		500.00	800.00
Good land		350.00	500.00
Fair land		150.00	250.00
Taxes and insurance, per acre:			
Best land		5.00	5.50
Good land		2.00	2.25
Fair land		1.00	1.10
Cost of the crop:			
Plowing, working down and marking	per acre:	5.00	9.00
Planting	per acre:		
Plants -	Homegrown, or:	1.50	2.50
	Purchased	5.00	6.00
Setting		2.00	4.00
Cultivating	per acre:	2.00	3.50
Hoeing	per acre:	2.00	3.50
Harvesting and marketing 2/			
For cannery -			
Picking	per ton	2.00	4.00
Hauling (3 miles)	per ton	1.00	1.50
For local shipments -			
Picking	per ton	3.00	6.00
Packing and shipping,	per 30-lb. lug	.10	.12
For eastern shipments -			
Picking	per ton	3.00	6.00
Packing and shipping,	per 24-lb. crate	.12	.15
Farm returns from product:			
Cannery, per ton, f.o.b. -			
High		8.00	20.00
Low		6.00	15.00
Usual		7.00	18.00
Market, per ton -			
High		60.00	50.00
Low		15.00	20.00
Usual		25.00	28.00
Yield per acre: 3/			
Good	tons:	20	20
Usual	tons:	10	10

1/ General estimates pertaining to cost of tomato production by commercial growers in the major producing sections of the State under "normal" (pre-war, 1915-16) and "high" (war and early post-war, 1918-19) conditions have been published in Farm Management Notes by R. L. Adams, 7th edition, 1921. These estimates were secured by a wide inquiry into operations and expense. They are not the result of a detailed survey. They do not include interest or depreciation of stock, improvements and equipment, or cost of management. Above table is a summarization from this publication which should be referred to for explanations.

2/ Cannaries get 10 - 75 percent of crop, rest shipped fresh to markets. The shipping crop usually runs from 4 to 6 tons.

3/ "Good" and "usual" yields represent what it is possible to obtain, and not average yields. Of 100 growers, probably not more than 7 or 8 will secure "good" yields year in and year out. 30 to 50 will fall in the "usual" class. The remainder produce yields either better than "good" or less than "usual".

TOMATOES: Cost data - California

Table 5. - Tomatoes for market and for manufacture

Item	For market	For manufacture
	Dollars	Dollars
Cost per acre:		
Use of land (taxes only)	2.22	2.22
Disking	.90	.90
Plowing	1.91	1.91
Disking	.90	.90
Harrowing	1.04 (2)	1.04 (2)
Floating	.68 (2)	.68 (2)
Marking	.42 (2)	.42 (2)
Planting	1.16	1.16
Watering plants	.65	.65
Plants	4.20	4.20
Furrowing for irrigation	1.84 (2)	1.84 (2)
Irrigating	1.50 (2)	1.50 (2)
Water	5.00	5.00
Cultivating	1.18 (2)	1.18 (2)
Cultivating	2.14 (2)	2.14 (2)
Cultivating	.86 (2)	.86 (2)
Hoeing	.75	.75
Picking	18.00	27.00
Hauling from field	3.90	6.48
Hauling to packing shed (contract)	7.50	-
Hauling to cannery (contract)	-	9.00
Rent for lug boxes	3.20	4.80
Mowing off vines	.50	.50
Raking vines	.29	.29
Burning vines	.50	.50
Total cost	<u>1/</u> 61.24	75.92
Yield per acre	tons: 6.0	12.0
Cost per ton	dollars: 10.10	6.33
Requirements per acre:		
Man labor	hours: <u>2/</u> 117.	<u>3/</u> 161.
Horse work	hours: <u>2/</u> 33.	<u>3/</u> 40.
Tractor use	hours: <u>4/</u> 6.1	<u>4/</u> 6.1
Plants	number: 1200.	1200.
Water	acre-inches: 12.	12.
Lug boxes (rented)	number: 320.	480.
Labor and power requirements per acre, by operations:	Hours	Hours
Disking - <u>5/</u>		
Man Labor	.74	.74
Tractor use	.74	.74
Plowing - <u>6/</u>		
Man labor	1.58	1.58
Tractor use	1.58	1.58

TOMATOES: Cost data - California

Table 5. - For market and for manufacture - Continued

Item	For market	For manufacture
	Hours	Hours
Labor and power requirements per acre, by operations - continued		
Disking - <u>5/</u>		
Man labor	.74	.74
Tractor use	.74	.74
Harrowing - <u>7/</u>		
Man labor	.95 (2)	.95 (2)
Tractor use	.95	.95
Floating - <u>8/</u>		
Man labor	.62 (2)	.62 (2)
Tractor use	.62	.62
Marking - <u>9/</u>		
Man labor	.90 (2)	.90 (2)
Horse work	1.80	1.80
Planting - <u>10/</u>		
Man labor	3.33	3.33
Horse work	2.22	2.22
Watering - <u>11/</u>		
Man labor	1.11	1.11
Horse work	2.22	2.22
Furrowing for irrigation - <u>12/</u>		
Man labor	1.49 (2)	1.49 (2)
Tractor use	1.49	1.49
Irrigating -		
Man labor	6.00 (2)	6.00 (2)
Cultivating - <u>13/</u>		
Man labor	2.22 (2)	2.22 (2)
Horse work	4.44	4.44
Cultivating - <u>14/</u>		
Man labor	6.00 (2)	6.00 (2)
Horse work	6.00	6.00
Cultivating - <u>15/</u>		
Man labor	2.47 (2)	2.47 (2)
Horse work	2.47	2.47
Hoeing -		
Man labor	3.00	3.00
Picking -		
Man labor	72.00	108.00
Hauling from field -		
Man labor	10.80	18.00
Horse work	10.80	18.00
Clearing off vines:		
Mowing - <u>16/</u>		
Man labor	.93	.93
Horse work	1.86	1.86
Raking - <u>17/</u>		
Man labor	.57	.57
Horse work	1.14	1.14
Burning -		
Man labor	2.00	2.00

TOMATOES: Cost data - California

Table 5. - Tomatoes for market and for manufacture - Continued

Data from Calif. Agr. Col. Farm Management Crop Manual by R. L. Adams and L. A. Crawford. Mimeogr. 1933. The data demonstrate a method by which basic data on yields, prices and costs may be used for the purpose of calculating the cost of producing a crop under specifically stated conditions. The costs as given show the operations commonly employed by experienced growers in selected commercial growing areas in the State; cost per acre of performing each operation resulting from the combined costs of man labor, motive power, materials and supplies, and charges for use of equipment and taxes. They do not include charges for management, use of land (except taxes), and use of minor equipment, as hoes, pitchforks, shovels, etc. Figures in parentheses () indicate the number of times an operation was performed, if more than once.

- 1/ Does not include packing.
- 2/ Does not include hauling to packing shed and packing.
- 3/ Does not include hauling to cannery.
- 4/ 19-horse power tractor.
- 5/ 5-foot double disk.
- 6/ 2-14-inch plows.
- 7/ 20-foot spike harrow.
- 8/ 12-foot plank drag.
- 9/ 2-horse, 2-row marker.
- 10/ 2-horse transplanter.
- 11/ 2-horse water wagon.
- 12/ 5-foot furrower.
- 13/ 2-horse, 5-foot cultivator.
- 14/ 1-horse walking cultivator.
- 15/ 1-horse, 4-foot spike harrow.
- 16/ 6-foot mower.
- 17/ 12-foot rake.

TOMATOES: Cost data - California

Table 6. - Tomatoes for manufacture, selected areas, 1926-27

Item	:Los Angeles and: :San Bernardino : : Counties, : : Los Angeles :		Sacramento : and Yolo : Counties, : Sacramento :		: Santa Clara : County, : San Jose	
	: 1926 :	: 1927 :	: 1926 :	: 1927 :	: 1926 :	: 1927 :
	: Number:	: Number:	: Number:	: Number:	: Number:	: Number:
Records	: 20 :	: 20 :	: 16 :	: 16 :	: 17 :	: 17 :
Acres per record <u>1/</u>	: 13.6 :	: 19.6 :	: 14.5 :	: 18.6 :	: 26.0 :	: 24.1 :
	:Dollars:	:Dollars:	:Dollars:	:Dollars:	:Dollars:	:Dollars:
Cost per acre:	:	:	:	:	:	:
Use of land -	:	:	:	:	:	:
Interest	:2/63.03:	2/61.96:	14.95 :	14.11:	29.54:	30.55
Taxes	: 8.62:	7.43:	3.24 :	2.98:	5.58:	5.12
Man labor <u>3/</u>	: 26.20:	25.26:	26.67 :	27.62:	39.48:	37.27
Contract labor	: 35.43:	27.89:	19.92 :	10.04:	24.34:	14.18
Horse work	: 7.97:	4.71:	2.88 :	3.37:	5.70:	5.63
Tractor and truck use	: 22.44:	20.86:	24.10 :	18.21:	12.17:	12.27
Use of equipment	: 1.60:	1.60:	.65 :	.65:	.88:	.89
Plants	: 3.16:	3.01:	4.99 :	4.57:	7.03:	7.14
Fertilizer	: 2.58:	1.94:	.04 :	.03:	.29:	.56
Irrigation	: 9.75:	9.95:	.16 :	.02:	14.23:	15.07
Containers	: - :	.01:	2.94 :	1.68:	3.33:	2.05
Interest (other than land)	: .99:	.97:	.34 :	.34:	.47:	.52
Miscellaneous	: 2.92:	3.58:	.51 :	.68:	1.41:	1.62
Total cost	: 184.69:	169.17:	101.39 :	84.30:	144.45:	132.87
Less credits	: 8.88:	5.44:	.47 :	.37:	.73:	1.16
Net cost	: 175.81:	163.73:	100.92 :	83.93:	143.72:	131.71
Returns per acre	dollars: 149.58:	126.63:	101.11 :	60.51:	148.97:	91.35
Yield per acre <u>4/</u>	tons: 8.68:	7.50:	6.73 :	4.03:	10.37:	6.08
Net cost per ton	dollars: 20.24:	21.82:	15.00 :	20.81:	13.86:	21.67

Data from U. S. Tariff Comm. Canned Tomatoes and Tomato Paste. Report to the President, 1926-27.

1/ Acres harvested. Acres planted in Los Angeles and San Bernardino Counties 1926, 14.6; in Sacramento and Yolo Counties, 15.4. Acres planted and acres harvested were the same in all others.

2/ In the Los Angeles area there was a conspicuous divergence between an interest charge for use of land and a cash rental charge. The cash rental charge for this area was estimated at \$7.26 per acre in 1926, and \$8.26 per acre in 1927.

3/ Includes supervision.

4/ Per acre harvested.

Table 7. - Costs on three farms

Item		Farm A	Farm B	Farm C
		Number	Number	Number
Records		1	1	1
Acres per record		1.0	2.0	1.0
		Dollars	Dollars	Dollars
Cost per acre:				
Use of land		30.00	60.00	15.00
Man labor		171.90	486.45	37.10
Horse work		15.25	16.00	14.62
Use of equipment		5.00	5.00	-
Seed		.50	2.35	1.15
Manure		5.00	24.00	-
Manure from year before		-	15.00	-
Cover crop		-	-	9.00
Fertilizer		26.10	29.66	18.40
Acid phosphate		-	4.60	-
Use of greenhouse		30.00	-	-
Fuel		30.00	45.60	-
Spray materials		-	-	6.65
Containers		63.80	104.40	13.00
Marketing		-	-	10.95
Total cost		377.55	793.06	125.87
Yield per acre	baskets:	1009	1722	219
Cost per basket	dollar:	.37	.46	.57
Requirements per acre:				
Man labor	hours:	429.8	1081.0	92.8
Horse work	hours:	61.0	64.0	58.5
Manure	loads:	2	12	-
Fertilizer	pounds:	1200	1500	-
Containers (baskets)	number:	1100	1800	-

Data from Conn. Agr. Col. Ext. Bull. 120, Feb., 1928.

TOMATOES: Cost data - Delaware

Table 8. - Averages of costs estimated by growers over the State.

Item	Growers reporting	For manufacture
	Number	Dollars
Cost per acre:		
Use of land		4.50
Man labor) plowing		
Horse work (and	122	3.61
Tractor use) fitting		
Plants (purchased) <u>1/</u>	108	2.41
Setting	131	1.52
Fertilizer	136	6.70
Cultivating	120	2.54
Picking	119	7.75
Hauling to cannery	111	9.13
Total cost		38.11
Yield per acre -		
Clay soil tons		8.4
Sandy soil tons		8.3
Any good rich well drained soil tons		8.6
Cost per ton -		
Clay soil dollars		4.54
Sandy soil dollars		4.59
Any good rich well drained soil dollars		4.43
Requirements per acre:		
Fertilizer pounds		550

Data from Del. Col. Agr. Expt. Sta. Bull. 101, May, 1913. Cost figures for the several items are averages of the estimates of the number of growers reporting for each item.

1/ Thirty-one growers estimated \$1.00 as cost of plants per acre when home grown from seed.

TOMATOES: Cost data - Florida

Table 9. - Tomatoes for market, selected areas, 1925-26 and 1926-27

Item	North, Central- Marion and Sumter Counties		South, East- Coast - Dade County		South, West Coast - Manatee County	
	1925-26	1926-27	1925-26	1926-27	1925-26	1926-27
	Number:	Number:	Number:	Number:	Number:	Number:
Records	27	27	41	52	25	28
Acres per record (harvested)	23.1	16.1	40.7	68.7	13.1	17.1
	Dollars:	Dollars:	Dollars:	Dollars:	Dollars:	Dollars:
Cost per acre:	:	:	:	:	:	:
Use of land -	:	:	:	:	:	:
Interest	8.16	7.95	16.27	14.09	37.57	37.70
Taxes	2.89	3.11	3.68	3.14	8.66	8.52
Man labor (including contract)	30.29	28.82	108.47	91.22	110.05	107.47
Supervision	3.83	3.96	8.33	6.38	6.06	8.31
Horse work	7.55	10.45	7.69	6.28	12.44	13.71
Tractor and truck use	7.20	5.25	21.94	17.09	16.17	19.21
Auto	.71	.78	3.12	1.79	3.09	3.24
Use of equipment	1.41	1.68	3.09	2.64	14.87	12.73
Plant's	1/3.37	1/3.30	1.89	2.03	5.10	4.93
Manure and cover crop	-	.06	9.44	8.42	.18	.33
Commercial fertilizer	23.91	25.50	84.38	82.81	67.68	61.90
Spray and poison	2.18	2.36	4.94	6.05	6.67	4.62
Irrigation	.03	.46	-	-	4.19	4.19
Interest (other than land)	.68	.86	1.33	1.41	4.10	5.74
Miscellaneous	.46	.57	11.94	6.18	3.20	3.03
Total cost 2/	92.67	3/95.11	286.51	249.53	300.03	295.63
Returns per acre	124.80	67.57	431.66	183.77	401.96	240.14
Yield per acre 2/ 100 pounds	44.1	30.3	68.3	74.4	77.3	100.9
Cost per 100 pounds 4/ dollars	2.10	3.14	4.19	3.35	3.88	2.93

Data from U. S. Tariff Comm. Fresh Tomatoes. Preliminary Statement of Information. Mimeogr.

1/ Seeds.

2/ Per acre harvested.

3/ Credit of \$.05 for ripe tomatoes sold should be deducted for the net cost.

4/ Per 100 pounds harvested.

TOMATOES: Cost data - Florida

Table 10. - Tomatoes for market, selected areas, 1929-30 and 1930-31

Item	: South, East Coast:		: South, West Coast	
	: Broward, Collier :		: and Dade Counties: Manatee County	
	1929-30:	1930-31	1929-30:	1930-31
	Number	Number	Number	Number
Records	42	43	14	16
Acres per record	73.8	83.0	13.2	13.7
Cost per acre:	Dollars	Dollars	Dollars	Dollars
Use of land (cash rental basis)	10.70	10.52	31.68	29.00
Growing	42.17	42.44	93.49	93.90
Harvesting	25.01	10.66	29.40	27.92
Packing 1/	73.02	23.51	94.97	82.16
Plants	5.20	5.46	14.59	14.23
Fertilizer	64.48	61.41	74.88	73.51
Spray material	6.00	5.22	5.26	6.02
Irrigation	-	-	.53	.46
Miscellaneous	9.71	8.56	8.07	8.25
Total cost	236.29	172.78	355.87	335.45
Returns per acre 2/	194.79	81.90	428.97	190.65
Yield per acre 3/	30-lb. lugs: 151	65	237	205
Cost per lug 4/	dollars: 1.56	2.65	1.50	1.63

Data from U. S. Tariff Comm. Report to the President on Fresh Vegetables.
Report No. 39. Second Series.

Note: Acre costs were obtained by dividing the number of acres planted on each farm into the total cost on that farm and then taking a simple average of those costs for the area as a whole.

Unit costs were obtained by dividing the acre costs of each area by the yield per acre for that area. Yields are simple averages of the acre yields on each farm.

- 1/ Packing was done by cooperatives and by dealers who marketed the crop.
2/ Lugs harvested times average price received by growers.
3/ Lugs harvested.
4/ Per lug harvested.

TOMATOES: Cost data - Florida

Table 11. - Labor and power requirements per acre by operations, Manatee County, 1926

Item	Man	Horse	Tractor	Truck
	labor	work	use	use
	Hours	Hours	Hours	Hours
Seed bed labor	8.1	.8	-	-
Preparing land	15.6	15.0	3.5	-
Fertilizing and manuring	9.5	6.9	-	1.1
Planting	27.9	-	-	-
Cultivating	20.8	20.7	-	-
Spraying and dusting	8.6	3.8	-	-
Hoing	20.4	-	-	-
Miscellaneous, growing	163.4	1.4	-	-
Harvesting	84.4	-	-	-
Hauling to market	7.0	1.9	-	5.4

Data from Fla. Univ. Rec. Vol. XXII, No. 2.

TOMATOES: Cost data - Florida

Table 12.- Requirements per acre, Manatee County, 1926

Item	Per acre		Acreage and amount	
	on total	acres	per acre	where applied
	Hours			
Labor and power:				
Man labor	365.7			
Horse work	50.5			
Tractor use	3.5			
Truck use	6.5			
	Pounds	Acres		Pounds
Seed bed materials:				
Seed	.34	---		---
Fertilizer	20	228.5		22
Castor pomace	11	141		20
Manure	40	9		1111
Lime, for bordeaux	.2	171		.3
Bluestone for bordeaux	.2	171		.3
Poison	.3	15		5
Wooden frames	1/ 2.00	179	1/	2.79
Cloth	2/ 32	143	2/	56
	Pounds	Acres		Pounds
Field crop materials:				
Fertilizer, before planting	524	182.5		719
Fertilizer, after planting	1654	250.5		1654
Nitrate of soda	32	65.5		122
Castor pomace	291	65		1123
Bluestone for bordeaux	5	157.5		7.9
Poison	28.4	---		---
Twine	4.4	117		9.5
Lime	6.4	157.5		10.1
Lead arsenate	1.6	149.5		2.7
Dust	13.8	47		73.7
Gasoline, for tractor	3/ 5.8	197	3/	7.4
Oil, for tractor	3/ .2	197	3/	.3
Stakes	4/ 2876	117	4/	6157
Records	number:	14		
Acres per record	number:	17.9		
Yield per acre	24-qt. crates:	212		

Data from Fla. Univ. Rec. Vol. XXII, No. 2.

1/ Total value in dollars, yearly depreciation, 15.6 percent.

2/ Yards.

3/ Gallons.

4/ Total number, annual depreciation, 13.0 percent.

TOMATOES: Cost data - Indiana

Table 13.- Tomatoes for manufacture, selected areas

Item	:	1926	:	1927	:	1926	:	1927	:	1930-31
	:	Number	:	Number	:	Number	:	Number	:	Number
Records	:	25	:	5	:	27	:	27	:	13
Acres per record <u>2/</u>	:	4.0	:	5.6	:	6.1	:	4.4	:	5.2
	:	Dollars	:	Dollars	:	Dollars	:	Dollars	:	Dollars
Cost per acre:	:		:		:		:		:	
Use of land -	:		:		:		:		:	
Interest	:	9.05	:	8.53	:	4.98	:	4.94	:	5.90
Taxes	:	2.74	:	2.40	:	1.61	:	1.56	:	
Man labor	:	<u>3/</u> 24.90	:	<u>3/</u> 23.67	:	<u>3/</u> 32.22	:	<u>3/</u> 28.61	:	24.14
Contract labor	:	10.30	:	16.54	:	9.29	:	8.53	:	---
Horse work	:	10.42	:	9.87	:	15.55	:	15.78	:	5.37
Tractor use	:	(4.55	:	6.72	:	.94	:	.78	:	1.20
Truck use	:	)	:		:		:		:	2.82
Use of equipment	:	.86	:	.86	:	1.71	:	1.77	:	2.16
Plants or seed	:	6.63	:	5.84	:	5.59	:	5.21	:	9.16
Manure	:	---	:	---	:	---	:	---	:	3.90
Fertilizer	:	7.57	:	7.77	:	8.36	:	10.06	:	5.71
Containers	:	.97	:	.86	:	.01	:	---	:	---
Interest (other than on land)	:	.56	:	.57	:	1.10	:	1.11	:	---
Miscellaneous	:	3.22	:	3.41	:	.90	:	.90	:	4/ 4.53
Total cost	:	81.77	:	87.04	:	82.26	:	79.25	:	64.89
Returns per acre	:	75.08	:	105.54	:	82.09	:	76.08	:	77.46
Yield per acre <u>5/</u>	tons:	5.74	:	8.79	:	6.67	:	6.14	:	6.66
Cost per ton	dollars:	14.24	:	9.91	:	12.32	:	12.90	:	9.74
Requirements per acre:	:		:		:		:		:	
Man labor	hours:	---	:	---	:	---	:	---	:	96.6
Horse work	hours:	---	:	---	:	---	:	---	:	41.3
Tractor use	hours:	---	:	---	:	---	:	---	:	1.67
Truck use	hours:	---	:	---	:	---	:	---	:	6.27
Fertilizer	pounds:	---	:	---	:	---	:	---	:	317
Plants	number:	---	:	---	:	---	:	---	:	6/ 4600

Data for 1926 and 1927 from U. S. Tariff Comn. Canned Tomatoes and Tomato Paste. Report to the President, 1926-27; for 1930-31 from Ind. Agr. Expt. Sta. Bull. 378.

1/ Grant, Hamilton, Howard and Madison Counties.

2/ Acres harvested. Acres planted in Kokomo area in 1926, 4.3; in the Brownstown area in 1927, 4.6. Acres planted and acres harvested were the same in all others.

3/ Includes supervision.

4/ Overhead.

5/ Per acre harvested.

6/ Includes 1300 replants.

TOMATOES: Cost data - Kentucky and Maryland . . .

Table 14.- Tomatoes for manufacture, Kentucky, estimated requirements per acre 1/

Item	:	Requirements per acre
Man labor	hours:	160
Horse work	hours:	120
Seed	ounces:	2
Fertilizer	pounds:	500
Canvas	yards:	18

Data from Ky. Agr. Expt. Sta. Bull. 289, Nov., 1928.

1/ Use of equipment \$1.50, cost of seed \$0.50, fertilizer \$5.50, and canvas \$0.90 are the only cost items reported. The yield was 175 bushels per acre and the returns \$70.00.

Table 15.- Tomatoes for manufacture, Caroline and Talbot Counties, Maryland

Item	Caroline and Talbot Counties	
	Denton and Easton	
	1926	1927
	Number	Number
Records	25	25
Acres per record <u>1/</u>	4.6	4.6
	Dollars	Dollars
Cost per acre:		
Use of land -		
Interest	4.77	4.76
Taxes	1.15	1.21
Man labor <u>2/</u>	16.33	16.16
Contract labor	2.81	4.95
Horse work	6.69	7.37
Tractor and truck use	2.02	2.41
Use of equipment	1.67	1.67
Plants	3.88	3.90
Fertilizer	20.89	20.29
Containers	1.83	1.74
Interest (other than on land)	.93	.92
Miscellaneous	.41	.65
Total cost	63.38	66.03
Returns per acre	56.96	56.20
Yield per acre <u>3/</u>	tons: 3.07	4.24
Cost per ton	dollars: 20.50	15.56

Data from U. S. Tariff Comm. Canned Tomatoes and Tomato Paste. Report to the President, 1926-27.

1/ Acres planted.

2/ Includes supervision.

3/ Per acre harvested.

Table 16. - Tomatoes for manufacture, Eastern Shore and Harford County, 1925-27

Item	Eastern Shore				Harford County			
	1925	1926	1927	1925-27	1925	1926	1927	1925-27
Records	Number	Number	Number	Number	Number	Number	Number	Number
	83	169	222	474	13	26	40	79
Acres per record	7.9	6.3	6.5	6.6	7.6	4.7	5.2	5.4
Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Cost per acre:								
Use of land (taxes only)	.85	.82	.86	.84	1.39	1.16	.93	1.16
Labor and power by operations-								
Preparing soil	5.10	4.54	5.03	4.86	7.18	6.58	7.83	7.18
Planting	3.92	4.01	4.13	4.02	6.17	6.73	6.72	6.52
Cultivating	4.49	4.35	4.58	4.44	5.99	5.54	7.35	6.25
Spraying	.13	.14	.44	.24	.14	.04	.10	.09
Picking	10.40	6.32	12.14	9.89	14.59	14.06	23.19	18.77
Transporting	6.08	2.58	7.50	5.47	8.49	6.62	14.06	10.47
Use of equipment	1.54	1.45	1.60	1.53	2.41	2.46	2.37	2.41
Seed	.77	.72	.87	.79	.61	.77	.81	.73
Plants	4.04	3.59	3.31	3.65	4.24	4.32	3.80	4.13
Manure	8.14	8.57	8.16	8.24	9.22	10.26	9.42	9.87
Fertilizer	10.12	9.66	8.82	9.50	10.72	10.76	9.72	10.35
Lime	.07	.15	.31	.18	1.24	.75	1.02	1.00
Containers	1.12	1.19	1.09	1.15	.84	1.61	2.17	1.79
Total cost	56.77	48.09	58.84	54.80	73.23	71.66	89.49	80.72
Returns per acre	78.05	51.86	80.34	70.30	98.98	79.25	139.14	115.33
Yield per acre	5.0	2.78	5.79	4.62	6.2	5.4	10.05	7.85
Cost per ton	11.35	17.30	10.16	11.86	11.81	13.27	8.90	10.28
Requirements per acre:								
Man labor		81	102	91		92	133	112
Horse work		59	78	69		71	98	85
Tractor use		.6	.8	.8		1.0	.8	.9
Seed		.25	.26	.26		.23	.25	.24
Plants		3614	3301	3457		4240	3806	4023
Manure		3.14	2.92	3.03		3.47	3.13	3.30
Fertilizer		571	544	557		595	586	590
Lime		26	49	37		102	133	117

Table 16. - Tomatoes for manufacture, Eastern Shore and Harford County, 1925-27 - Continued

Item	Eastern Shore			Harford County		
	1926	1927	Hours	1926-27	1926	Hours
Labor and power requirements:						
per acre, by operations:						
Preparing soil-						
Man labor	7.0	7.3		7.1	8.3	10.6
Horse work	19.0	19.5		19.2	20.3	22.1
Tractor use	.6	.8		.8	1.0	.8
Applying fertilizer-						
Man labor	1.7	1.4		1.6	.7	.9
Horse work	2.2	2.0		2.1	1.2	.8
Applying manure-						
Man labor	5.4	4.9		5.2	6.1	4.8
Horse work	9.1	8.5		8.8	10.1	9.4
Applying lime-						
Man labor	.1	.1		.1	.2	.3
Horse work	.1	.1		.1	.3	.4
Planting-						
Man labor	15.2	13.9		14.6	19.5	17.2
Horse work	3.3	3.7		3.5	4.2	3.5
Cultivating-						
Man labor	11.7	11.2		11.4	10.0	14.9
Horse work	13.1	13.3		13.2	17.3	16.1
Spraying-						
Man labor	.3	1.2		.7	.1	.2
Picking-						
Man labor	33.4	46.3		39.9	37.8	61.1
Transporting-						
Man labor	6.1	15.6		10.8	8.9	22.8
Horse work	12.2	31.2		21.7	17.9	45.6

Data from Md. Agr. Expt. Sta. Bull. 304.

1/ Includes replants.

TOMATOES: Cost data - Michigan

Table 17.- Tomatoes for manufacture, Hillsdale, Lenawee, Monroe, Washtenaw and Wayne Counties, 1930-31

Item		1930	1931
		Number	Number
Records		5	6
Acres per record		8.8	5.0
		Dollars	Dollars
Cost per acre:			
Use of land		6.00	5.25
Man labor		18.60	25.09
Picking and hauling (contract)		7.50	13.27
Horse work		3.12	3.93
Tractor use		1.94	2.01
Use of equipment		1.98	1.89
Plants		12.00	10.10
Manure		2.96	2.36
Fertilizer		8.30	9.16
Miscellaneous		3.65	3.50
Total cost		66.05	75.66
Yield per acre	tons:	8.06	11.96
Cost per ton	dollars:	8.20	6.33
Requirements per acre:			
Man labor <u>1/</u>	hours:	74.4	125.4
Horse work <u>1/</u>	hours:	24.0	30.3
Tractor use <u>1/</u>	hours:	2.28	2.87
Plants	number:	2685	2607
Manure	tons:	3.06	2.80
Fertilizer	pounds:	437	449

Data from Mich. Agr. Expt. Sta. Spec. Bull. 241.

1/ Does not include picking and hauling by contract.

TOMATOES: Cost data - Mississippi

Table 18. - Tomatoes for market, Copiah County

Item	1921	1925-26	1926-27
	Number	Number	Number
Records	16	30	30
Acres per record (harvested)	-	13.5	15.3
	Dollars	Dollars	Dollars
Cost per acre:			
Use of land -			
Interest	9.00	2.64	2.71
Taxes		.88	.80
Man labor	47.25	50.77	54.17
Supervision	-	6.99	6.91
Horse work	14.37	8.94	8.64
Tractor and truck use	-	12.95	15.60
Auto	-	.73	.76
Use of equipment	3.37	7.09	6.58
Seeds	2.26	-	-
Plants	-	23.12	23.03
Manure and cover crops	-	.14	.28
Fertilizer	25.77	36.77	35.19
Spray and poison	-	1.51	1.11
Containers	64.29	-	-
Sash	1.27	-	-
Sticks	3.85	-	-
Lumber	1.32	-	-
Cloth	3.23	-	-
Jute	1.66	-	-
Straw	1.47	-	-
Interest (other than land)	-	2.35	1.57
Miscellaneous	-	5.15	4.83
Total cost	3/ 170.20	4/ 160.03	4/ 162.18
Less credits	-	3.10	1.89
Net cost	5/ 170.20	4/ 156.93	4/ 160.29
Returns per acre	323.00	275.22	374.46
Yield per acre	5/ 323	6/ 59.7	6/ 82.3
Cost per unit	dollars: .53	7/ 2.63	7/ 1.95
Requirements per acre:			
Man labor	hours : 313	-	-
Horse work	hours : 125	-	-
Seed	ounces : 1.7	-	-
Fertilizer	pounds : 1195	-	-
Containers	crates : 323	-	-

Data for 1921 from Miss. Agr. Expt. Sta. Cir. 39; for 1925-26 and 1926-27 from U. S. Tariff Comn. Fresh Tomatoes. Preliminary Statement of Information. Mimeogr.

1/ Includes \$4.30 contract work.

2/ Includes \$5.57 contract work.

3/ The items add to \$8.91 more than the total in source of data.

4/ Per acre harvested.

5/ Crates.

6/ 100 pounds per acre harvested.

7/ Per 100 pounds harvested.

TOMATOES: Cost data - New Jersey

Table 19. - Costs in Cumberland County and Central New Jersey

Items	Cumberland County, :				
	Bridgeton :		Central New Jersey		
	For manufacture :		For manu- :	For market	
	1926 :	1927 :	1927 :	1927 :	1928
	Number :	Number :	Number :	Number :	Number
Records	26 :	26 :	22 :	31 :	25
Acres per record	9.6 :	9.1 :	9.5 :	7.6 :	4.8
	Dollars :	Dollars :	Dollars :	Dollars :	Dollars
Cost per acre:	:	:	:	:	:
Use of land-	:	:	:	:	:
(rental basis)	- :	- :	11.16 :	12.49 :	12.44
Interest	5.97 :	5.96 :	- :	- :	-
Taxes	3.13 :	3.09 :	- :	- :	-
Man labor	1/ 12.19 :	1/ 12.79 :	55.00 :	112.94 :	76.62
Contract labor	15.03 :	16.66 :	- :	- :	-
Horse work	7.12 :	7.67 :	8.00 :	12.05 :	15.53
Tractor and truck use	6.65 :	7.77 :	(16.32 :	13.08 :	10.02
Use of equipment	1.74 :	1.77 :	) :	:	:
Seed and plants	4.89 :	4.70 :	9.34 :	1.74 :	2.04
Fertilizer	33.73 :	35.09 :	17.18 :	17.27 :	19.93
Manure	- :	- :	10.45 :	- :	-
Containers	2.29 :	2.66 :	- :	- :	-
Interest	:	:	:	:	:
(other than land)	1.27 :	1.28 :	- :	- :	-
Miscellaneous	.22 :	.93 :	10.87 :	19.98 :	32.58
Total cost	94.93 :	100.37 :	138.32 :	189.55 :	169.16
Returns per acre	82.72 :	89.47 :	140.73 :	331.80 :	150.40
Yield per acre	unit: 2/ 4.78 :	2/ 5.81 :	2/ 7.55 :	3/ 395 :	3/ 188
Cost per unit	dollars: 19.87 :	17.27 :	18.32 :	.48 :	.90
	:	:	:	Crates :	Crates
Lowest yield per acre	- :	- :	- :	180 :	43
Highest yield per acre	- :	- :	- :	727 :	367
	Dollars :	Dollars :	Dollars :	Dollars :	Dollars
Lowest cost per crate	- :	- :	- :	.24 :	.57
Highest cost per crate	- :	- :	- :	.96 :	3.05
	Hours :	Hours :	Hours :	Hours :	Hours
Requirements per acre:	:	:	:	:	:
Man labor	- :	- :	152.8 :	262.8 :	197.9
Horse work	- :	- :	44.4 :	66.9 :	86.3
Tractor and truck use	- :	- :	10.5 :	6.7 :	3.2

Data for Cumberland County from U. S. Tariff Com. Canned Tomatoes and Tomato Paste. Report to the President, 1926-1927.

Data for Central New Jersey, 1927, from N. J. State Agr. Expt. Sta. 49th Ann. Rept. and N. J. Agr. Col. Expt. Sta. 41st Ann. Rept. and for 1928 from N. J. State Agr. Expt. Sta. 50th Ann. Rept. and N. J. Agr. Col. Expt. Sta. 42nd Ann. Rept.

1/ Includes supervision.

2/ Tons.

3/ 20-qt. crates.

TOMATOES: Cost data - New Jersey

Table 20.- Tomatoes for manufacture, selected counties, 1918

Item	Burlington	Garden	Cape	Cumberland	Gloucester	Salem	Average	
	ton	County	May	land	cester	County	for all	
	County	County	County	County	County	County	counties	
	Number	Number	Number	Number	Number	Number	Number	
Records	70	40	40	50	47	33	280	
Acres per record	12.1	14.2	3.7	8.0	8.6	7.5	9.3	
	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	
Cost per acre:								
Use of land								
(rental basis)	9.57	9.95	4.76	10.63	9.52	6.78	9.27	
Man labor	40.75	42.62	30.57	35.38	38.54	34.58	38.87	
Horse work	20.16	27.18	14.63	17.18	15.01	18.90	20.00	
Tractor use	-	.29	-	-	.62	.56	.12	
Truck use	4.12	2.32	.55	1.80	12.03	.45	4.13	
Use of equipment	6.23	7.21	4.04	6.16	5.74	5.59	6.17	
Seed	4.67	2.71	1.64	1.73	1.63	1.62	2.87	
Manure	10.51	15.69	10.99	16.44	13.88	23.19	14.29	
Fertilizer	14.71	15.63	11.52	15.09	15.80	11.12	14.62	
Lime	.08	.16	.06	.58	.24	.13	.20	
Cover-crop seed	1.41	1.10	.43	.45	1.14	.19	.99	
Spray materials	1.49	.77	.10	.14	1.44	.09	.91	
Containers	6.06	6.03	2.32	4.19	4.66	3.11	5.06	
Interest	1.79	1.98	1.22	1.65	1.79	1.59	1.76	
Miscellaneous	-	.17	-	-	-	-	-	
Total cost	1121.55	133.81	82.83	111.42	112.04	107.90	119.26	
Yield per acre	tons:	7.2	6.67	3.8	4.75	6.2	5.69	6.83
Cost per ton	dollars:	18.51	22.13	23.96	24.87	21.52	20.85	21.06
Requirements per acre:								
Man labor	hours:	157	168	106	118	2/127	115	142
Horse work	hours:	105	120	68	95	2/ 82	93	100
Tractor use	hours:	-	.22	-	-	-	.43	2.93
Truck use	hours:	3.3	1.2	.41	1.5	8.4	.45	.1
Seed	pound:	.07	.12	.28	.22	.14	.16	.14
Cover crop	bushel:	.77	.59	.14	.09	.51	.06	.5
Plants	number:	1573	897	470	368	536	200	893
Manure	tons:	5.31	7.36	4.99	8.68	7.75	11.84	7.23
Fertilizer	pounds:	860	845	518	802	788	650	801
Lime	ton:	.15	.02	.02	.11	.09	.04	.09
Containers	baskets:	43	42	15	30	32	22	37

Data from N. J. Agr. Expt. Sta. Bull. 353.

The contract price for 1918 was \$30.00 per ton.

1/ Total costs in source of data were \$121.57 for Burlington County, \$111.41 for Cumberland County, and \$122.05 for Gloucester County.

2/ N. J. Agr. Expt. Sta. 41st Ann. Rept. and N. J. Agr. Col. Expt. Sta. 33d Ann. Report, reported a study in Gloucester County for 1914-16. The requirements were: 220 hours man labor, and 142 hours horse work per acre.

TOMATOES: Cost data - New Jersey

Table 21.- Tomatoes for manufacture, selected counties, 1919

Item	Burlington: County	Camden: County	Cumber: County	Glou- County	Salem: County	Average for all counties	
	Number	Number	Number	Number	Number	Number	
Records	56	41	31	48	29	205	
Acres per record	12.0	12.3	8.5	7.5	7.8	9.6	
	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	
Cost per acre:							
Land charge							
(rental basis)	9.04	12.69	10.42	10.33	8.06	10.24	
Man labor	35.40	35.46	27.95	34.65	27.33	33.59	
Horse work	18.30	18.80	10.92	14.67	12.49	16.38	
Tractor use	.56	.15	-	.17	.45	.31	
Truck use	4.82	2.12	.57	4.40	.56	3.22	
Auto	.50	.16	.07	.42	.21	.32	
Use of equipment	5.21	6.23	4.52	4.32	4.74	5.18	
Hot bed materials	.92	2.39	.47	.79	.58	1.19	
Seed	.46	.54	.98	.62	.75	.60	
Plants	6.09	2.69	.87	3.39	1.26	3.63	
Manure	13.97	12.20	17.45	14.78	23.01	15.07	
Fertilizer	19.65	19.47	18.48	26.46	13.97	20.08	
Lime	1.07	3.61	.98	.82	.54	1.60	
Cover crop seed	2.26	2.12	.59	1.40	.37	1.68	
Spray materials	.93	.66	.08	1.52	.09	.78	
Containers	3.57	2.33	2.33	1.96	1.49	2.59	
Insurance	.13	.30	.05	.42	.06	.21	
Interest	1.86	1.82	1.45	1.76	1.45	1.74	
Total cost	124.74	123.74	98.18	123.38	97.41	118.41	
Yield per acre	tons:	2.7	2.22	1.22	1.79	1.14	2.09
Cost per ton	dollars:	46.21	55.73	80.48	68.77	85.42	56.56
Requirements per acre:							
Man labor	hours:	105	114	82	100	74	102
Horse work	hours:	75	89	65	62	68	70
Tractor use	hour :	.4	.1	-	.1	.3	.2
Truck use	hours:	3.3	1.6	.4	3.3	.4	2.2
Seed	pound:	.14	.16	.25	.13	.17	.16
Cover crop	bushels:	1.20	.16	.64	.60	.17	.84
Plants	number:	2198	740	562	1337	650	1320
Manure	tons:	6.05	4.78	8.6	7.09	13.15	6.0
Fertilizer	pounds:	911	895	1076	930	697	891
Lime	ton:	.56	.19	.42	.24	.20	.35
Spray materials	pounds:	6.14	3.48	.81	4.55	.70	-
Containers	baskets:	26	18	18	16	12	14

Data from N. J. Agr. Expt. Sta. Bull. 353.

The contract price for 1919 was \$24.00 per ton, later raised to \$30.00 while the open market was between \$50.00 and \$60.00.

1/ Total cost in source of data was \$123.88 for Gloucester County.

TOMATOES: Cost data - New Jersey

Table 22. - Tomatoes for manufacture, selected counties, 1920

Item	Burling- ton County	Carden County	Cumber- land County	Glou- cester County	Salem County	Average for all counties	
	Number	Number	Number	Number	Number	Number	
Records	-	-	-	-	-	205	
Acres per record	-	-	-	-	-	10.0	
	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	
Cost per acre:							
Land charge							
(rental basis)	9.79:	11.46:	12.31:	10.01:	13.78:	11.30	
Man labor <u>1/</u>	45.13:	46.51:	53.36:	50.78:	55.14:	49.10	
Horse work.	15.97:	17.28:	14.41:	17.87:	16.00:	16.33	
Tractor use	1.14:	1.10:	1.16:	.40:	.78:	.98	
Truck use	6.33:	8.47:	1.93:	5.64:	.78:	5.21	
Auto	.38:	.17:	.04:	.22:	.07:	.23	
Use of equipment	4.99:	5.25:	6.21:	5.81:	6.79:	5.65	
Hot bed materials	.30:	.06:	-	.11:	-	.12	
Seed	.38:	.44:	.92:	.59:	1.00:	.61	
Plants	6.12:	3.51:	.48:	2.88:	.53:	3.26	
Manure	11.80:	13.38:	28.21:	13.07:	20.95:	16.28	
Fertilizer	18.53:	20.53:	21.16:	20.07:	13.25:	18.71	
Lime	.61:	.25:	1.35:	1.21:	.39:	.66	
Cover crop	1.26:	1.85:	.17:	1.18:	.06:	1.04	
Spray materials	1.23:	.83:	.08:	1.71:	.01:	.81	
Containers	3.20:	3.51:	2.96:	3.16:	2.53:	3.13	
Insurance	.12:	.20:	.05:	.34:	.02:	.14	
Interest	1.91:	2.02:	2.17:	2.03:	1.98:	2.00	
Miscellaneous	.06:	.06:	-	.32:	-	.06	
Total cost	129.25:	136.88:	146.97:2/	137.40:	134.06:	135.62	
Yield per acre	tons:	5.54:	5.41:	8.14:	5.82:	6.47:	6.07
Cost per ton	dollars:	23.75:	25.29:	18.06:	23.36:	20.71:	22.34
Requirements per acre:							
Man labor	hours:	124	131	130	131	129	128
Horse work	hours:	71	75	89	83	97	81
Tractor use	hour :	.76:	.73:	.78:	.27:	.52:	.65
Truck use	hours:	4.2	5.6	1.29:	3.76:	.52:	3.48
Auto	hours:	1.65:	.78:	.23:	1.05:	.38:	-
Seed	pound:	.13:	.12:	.20:	.13:	.18:	.15
Cover crop	bushel:	.68:	.69:	.12:	.53:	.03:	.47
Plants	number:	2268	1263	279	1154	380	1338
Manure	tons:	6.72:	5.68:	10.29:	5.11:	12.4	7.74
Fertilizer	pounds:	834	925	1083	893	595	859
Lime	ton:	.27:	.09:	.43:	.42:	.13:	.24
Spray materials	pounds:	8.15:	-	-	-	-	-
Containers	baskets:	25	27	22	23	17	23

Data from N. J. Agr. Expt. Sta. Bull. 353.

The contract price for 1920 was \$24.00 per ton.

1/ Includes hired and operator's labor.

2/ Total cost in source of data was \$137.44 for Gloucester County.

TOMATOES: Cost data - New Jersey

Table 23. - Tomatoes for manufacture, selected areas, 1930-31

Item	Burlington, :		Cumberland :	
	Cumberland :		Burlington :	
	and Salem :		County :	
	Counties :		Salem :	
	1930 :		1931 :	
	Number :		Number :	
Records	70 :		29 :	
Acres per record	16.6 :		26.3 :	
	Dollars :		Dollars :	
Cost per acre:				
Use of land	9.91 :		8.35 :	
Man labor	42.05 :		28.83 :	
Horse work	6.95 :		7.56 :	
Tractor use	2.86 :		1.98 :	
Truck use	6.58 :		5.94 :	
Use of equipment	2.70 :		2.93 :	
Plants	12.11 :		15.74 :	
Manure	6.28 :		4.55 :	
Fertilizer	1/ 20.74 :		19.72 :	
Cover crop	1.08 :		- :	
Spray materials	1.96 :		3.58 :	
Containers	2.37 :		2.28 :	
Hired hauling	- :		1.01 :	
Interest	1.58 :		2.03 :	
Miscellaneous	- :		2.65 :	
Total cost	117.17 :		2/ 107.15 :	
Returns per acre	151.66 :		124.82 :	
Yield per acre	tons: 7.1 :		7.3 :	
Cost per ton	dollars: 16.50 :		14.69 :	
Requirements per acre:				
Man labor	hours: 120 :		116 :	
Horse work	hours: 39 :		42 :	
Tractor use	hours: 2.3 :		3.6 :	
Truck use	hours: 5.3 :		4.8 :	
Fertilizer	pounds: 1096 :		1209 :	
Plants	number: - :		4500 :	
	Hours :		Hours :	
Labor and power requirements				
per acre, by operations:				
Preparing seed bed -				
Man labor	6.6 :		- :	
Horse work	10.4 :		- :	
Tractor use	1.8 :		- :	

TOMATOES: Cost data - New Jersey

Table 23. - Tomatoes for manufacture, selected areas, 1930-31 - Continued

Item	Burlington,	Burlington	Cumberland
	Cumberland	County	and
	and Salem	County	Salem Counties
	Counties		
	1930	1931	1931
	Hours	Hours	Hours
Preharvest -			
Man labor	31.3	40.0	40.0
Horse work	27.7	35.0	34.0
Tractor use	.5	3.6	2.7
Truck use	.1	.5	.1
Harvesting -			
Man labor	82.3	67.5	36.5
Horse work	.5	7.0	.6
Truck use	5.2	-	-
Marketing -			
Man labor	-	8.0	5.6
Horse work	-	-	1.2
Truck use	-	4.3	2.1

Data for 1930 from N. J. State Col. Agr. Ext. Serv. Econ. Review No. 72; for 1931 from N. J. Agr. Col. Ext. Bull. 96.

1/ Includes \$0.83 for lime.

2/ Costs in Burlington County for 1933 estimated on basis of 6-year (1926-31) average yield of 6.03 tons were \$81.99 per acre and \$13.60 per ton. See N. J. Agr. Expt. Sta. Bull. 555.

TOMATOES: Cost data - New Mexico

Table 24. - Costs on irrigated land

Item	Middle					
	Elephant	Rio Grande	Deming	Hatch	Portales	
	Butte	Conservancy	area 1/	Valley	area 1/	
	Project	District		1/		
	1926-27	1929-31	1931	1931	1931	
	Number	Number	Number	Number	Number	
Records	12	-	12	11	9	
Acres per record	3.5	-	6.9	5.2	4.7	
	Dollars	Dollars	Dollars	Dollars	Dollars	
Cost per acre:						
Use of land -						
Interest	16.14	24.75	7.21	8.83	11.80	
Taxes	5.09	2.59	.57	1.80	2.32	
Man labor	2/ 40.17	77.14	25.08	24.37	19.70	
Horse work	7.52	4.36	3.52	3.18	2.09	
Truck use	1.67	-	-	-	-	
Equipment use	4.45	.51	4.40	.41	12.37	
Seed and plants	1.83	9.65	3/ 5.28	4/ 1.40	5.84	
Manure	3.55	-	.12	-	-	
Spray material	.67	-	.20	.03	.31	
Water for irrigation	2.60	2.30	12.36	1.93	2.86	
Containers	5/ 3.02	-	-	-	-	
Miscellaneous	6.65	-	-	-	-	
Total cost	5/ 91.56	121.78	59.24	6/ 42.45	57.29	
Yield per acre	7/ 149	8/ 2.43	3/ 3.60	3/ 4.90	8/ 4.30	
Cost per unit	dollars: 5/ .61	50.12	16.42	6/ 9.50	13.34	
	Hours	Hours	Hours	Hours	Hours	
Requirements per acre:						
Man labor	9/ 227	454	167	166	123	
Horse work	75	75	47	42	30	
	Hours	Hours	Hours	Hours	Hours	
Labor and power require-						
ments per acre, by						
operations:						
Soil preparation -						
Man labor	29.1	26.7	10.2	14.5	8.2	
Horse work	55.3	58.0	29.5	32.3	18.3	
Setting plants -						
Man labor	20.2	34.0	32.3	15.5	20.0	
Horse work	.1	-	-	-	-	
Cultivating -						
Man labor	13.7	16.1	10.3	6.9	9.8	
Horse work	13.7	16.8	16.4	8.6	10.4	
Hoeing -						
Man labor	37.0	78.5	13.1	21.2	11.8	
Irrigating -						
Man labor	15.3	24.3	21.6	4.9	22.0	
Insect control -						
Man labor	4.7	-	.3	2.8	3.5	

TOMATOES: Cost data - New Mexico

Table 24. - Costs on irrigated land - Continued

Item	:	:	Middle	:	:	:
	:	Elephant	Rio Grande	:	Hatch	Portales
	:	Butte	Conservancy	Deming	Valley	area 1/
	:	Project	District	area 1/	1/	:
	:	1926-27	1929-31	1931	1931	1931
	:	Hours	Hours	Hours	Hours	Hours
Labor and power require-	:	:	:	:	:	:
ments per acre, by	:	:	:	:	:	:
operations:	:	:	:	:	:	:
Ditching -	:	:	:	:	:	:
Man labor	:	-	-	.7	3.4	1.2
Horse work	:	-	-	1.0	1.5	1.1
Thinning -	:	:	:	:	:	:
Man labor	:	-	-	-	2.7	-
Harvesting -	:	:	:	:	:	:
Man labor	:	107.0	274.2	77.2	93.9	46.8
Horse work	:	6.2	-	-	-	-

Data for Elephant Butte Project from N. Mex. Agr. Col. Ext. Cir. 97; for Middle Rio Grande Conservancy District from N. Mex. Agr. Expt. Sta. Bull. 215; for the Deming area from N. Mex. Agr. Col. and Agr. Expt. Sta. Press Bull. 671. Mimeogr.; for Hatch Valley from N. Mex. Agr. Col. and Agr. Expt. Sta. Press Bull. 669. Mimeogr.; and for the Portales area from N. Mex. Agr. Col. and Agr. Expt. Sta. Press Bull. 658. Mimeogr.

1/ Costs per ton in 1930 were: \$23.86 in the Deming area, \$7.66 in Hatch Valley, and \$11.83 in the Portales area.

2/ Includes \$1.60 contract work.

3/ Includes \$.09 for seed and \$5.19 for plants.

4/ Includes \$1.29 for seed and \$.11 for plants.

5/ Includes field lugs only. Does not include cost of shipping lugs, packing and loading which amounted to \$.36 per crate. This cost was assumed by distributor and deducted from gross receipts when sales were made.

6/ Does not include hauling to factory.

7/ 23-pound lugs.

8/ Tons.

9/ Does not include packing and loading nor hours for \$1.60 contract labor.

TOMATOES: Cost data - New York

Table 25. - Tomatoes for manufacture, several areas, 1920

Item		: Chautauqua	: Niagara	: Orleans	: All
		: area	: area	: area	: areas
		: Number	: Number	: Number	: Number
Records		: 41	: 43	: 49	: 133
Acres per record		: 6.5	: 2.7	: 4.5	: 4.5
		: Dollars	: Dollars	: Dollars	: Dollars
Cost per acre:		:	:	:	:
Use of land		: 17.55	: 10.60	: 10.37	: 13.60
Man labor		: 60.42	: 82.77	: 71.59	: 68.77
Horse work		: 19.19	: 29.93	: 27.13	: 24.13
Tractor use		: 1.82	: 1.68	: .49	: 1.31
Auto and truck use		: 4.19	: 3.63	: 3.47	: 3.82
Use of equipment		: 6.42	: 10.02	: 9.08	: 8.07
Plants		: 21.67	: 22.49	: 22.04	: 21.98
Manure		: 3.94	: 8.47	: 7.86	: 6.23
Fertilizer		: 16.91	: 12.29	: 9.58	: 13.35
Interest ^{1/}		: 2.35	: 2.97	: 2.59	: 2.49
Miscellaneous		: .71	: 2.46	: .14	: .84
Total costs		: 155.17	: 187.31	: 164.34	: 164.59
Returns per acre		: 156.71	: 205.75	: 210.39	: 185.64
Yield per acre	tons	: 7.75	: 9.31	: 9.59	: 8.72
Cost per ton	dollars	: 20.02	: 20.12	: 17.14	: 18.88
Requirements per acre:		:	:	:	:
Man labor	hours	: 160	: 188	: 159	: 165
Horse work	hours	: 78	: 122	: 111	: 98
Tractor use	hour	: 1.0	: 1.0	: .3	: .7
Plants	number	: 3310	: 3208	: 3547	: 3377
Manure	tons	: 1.9	: 4.1	: 3.8	: 3.9
Fertilizer	pounds	: 750	: 475	: 487	: 602
Labor and power requirements		:	:	:	:
per acre, by operations:		:	:	:	:
Growing -		:	:	:	:
Man labor	hours	: 59.5	: 67.3	: 62.3	: 62.0
Horse work	hours	: 49.9	: 72.0	: 68.9	: 61.1
Tractor use	hour	: 1.0	: 1.0	: .3	: .7
Harvesting -		:	:	:	:
Man labor	hours	: 100.0	: 121.0	: 96.5	: 102.7
Horse work	hours	: 28.2	: 50.1	: 41.8	: 37.4

Data from N. Y. Cornell Agr. Expt. Sta. Bull. 412.

^{1/} Interest on growing and harvesting costs.

TONATOES: Cost data - New York

Table 26. - Tomatoes for manufacture, Orleans County

Item	Orleans County Albion	
	1926	1927
	Number	Number
Records	26	26
Acres per record <u>1</u> /	6.1	5.5
	Dollars	Dollars
Cost per acre:		
Use of land -		
Interest	6.94	6.99
Taxes	1.81	1.76
Man labor <u>2</u> /	20.34	19.49
Contract work	18.37	25.98
Horse work	7.70	7.29
Tractor and truck use	9.91	10.57
Use of equipment	1.35	1.35
Plants	17.47	19.10
Fertilizer	14.50	14.81
Interest	.91	.89
Miscellaneous	1.94	2.04
Total cost	101.24	110.27
Returns per acre	117.09	138.31
Yield per acre <u>3</u> /	tons	tons
	7.66	9.63
Cost per ton	dollars	dollars
	13.23	11.44

Data from U. S. Tariff Comm. Canned Tomatoes and Tomato Paste. Report to the President, 1926-1927.

1/ Acres harvested. 6.2 acres planted in 1926.

2/ Includes supervision.

3/ Per acre harvested.

TOMATOES: Cost data - New York

Table 27. - Tomatoes for manufacture, Central and Western New York

Item	1930	1931	1932	1933	1934
	Number	Number	Number	Number	Number
Records	9	-	10	8	11
Acres per record	6.2	-	11.5	9.2	9.0
	Dollars	Dollars	Dollars	Dollars	Dollars
Cost per acre:					
Use of land	5.93	-	4.88	4.24	4.17
Man labor	<u>1/</u> 46.58	-	30.70	32.83	<u>2/</u> 36.38
Horse work	5.39	-	2.71	2.70	3.75
Tractor use	<u>3/</u> 4.76	-	3.05	2.24	2.36
Truck use	3.08	-	-	-	-
Use of equipment	5.16	-	6.48	5.79	4.83
Plants	16.88	-	18.27	14.83	14.62
Manure	7.93	-	4.30	6.64	6.92
Fertilizer	15.93	-	10.55	7.57	7.20
Miscellaneous	4.04	-	3.35	1.60	1.57
Total cost	115.68	86.18	84.29	78.44	81.80
Value of crop per acre	82.45	88.96	97.41	68.40	91.56
Yield per acre	tons: 5.4	6.3	9.5	6.7	8.6
Cost per ton	dollars: 21.47	13.68	8.83	11.78	9.56
Requirements per acre:					
Man labor	hours: 111	110	124	124	128
Horse work	hours: 25	-	22	20	21
Tractor use	hours: <u>3/</u> 4.5	-	4.0	4.1	4.1
Fertilizer	pounds: 867	691	1011	804	479
	Hours	Hours	Hours	Hours	Hours
Labor and power requirements					
per acre, by operations:					
Growing -					
Man labor	37.9	-	29.7	31.8	31.4
Horse work	24.2	-	17.9	19.8	20.8
Tractor use	<u>3/</u> 4.5	-	4.0	4.1	4.1
Harvesting -					
Man labor	72.8	-	94.8	91.7	96.1
Horse work	.7	-	3.9	-	-

Data for 1930 from N. Y. Cornell Agr. Expt. Sta. Bull. 554; for 1931 from N. Y. Agr. Col. (Cornell) Ext. Bull. 274; for 1932 from N. Y. Agr. Col. (Cornell) Dept. Agr. Econ. and Farm Mangt. Results of Farm Cost Accounts, 1932. Mimeogr.; for 1933 from N. Y. Agr. Col. (Cornell) Dept. Agr. Econ. and Farm Mangt. Results of Farm Cost Accounts, 1933. Mimeogr.; and for 1934 from N. Y. Agr. Col. (Cornell) Dept. Agr. Econ. and Farm Mangt. Results of Farm Cost Accounts, 1934. Mimeogr.

1/ Includes \$1.91 labor and equipment selling costs.

2/ Includes \$4.19 selling cost.

3/ Tractor use and tools.

TOMATOES: Cost data - Ohio, Pennsylvania and South Carolina

Table 28. - Tomatoes for manufacture, Wood County, Ohio, and Lancaster County, Pennsylvania

Item	Ohio		Pennsylvania	
	Wood County		Lancaster County	
	1920		1923	1924
	Number		Number	Number
Records	26		2	2
Acres per record	7.1		4.0	4.0
	Dollars		Dollars	Dollars
Cost per acre:				
Use of land -	17.68		-	-
Rent	-		2.50	4.50
Taxes and insurance	-		1.11	1.49
Man labor	<u>1/</u> 15.96		39.41	43.08
Horse work	<u>1/</u> 7.33		21.60	9.02
Tractor use	3.07		.86	-
Use of equipment	2.38		3.49	4.72
Plants	8.99		4.00	-
Manure	7.90		7.87	6.00
Fertilizer	2.40		-	-
Interest on growing expense:	1.58		-	-
Harvesting cost	33.46		-	-
Miscellaneous	-		20.97	11.08
Total cost	100.75		101.81	79.89
Yield per acre	tons: 6.4		6.5	5.4
Cost per ton	dollars: 15.74		15.66	14.79
Requirements per acre:				
Man labor	hours: <u>1/</u> 34.0		164.7	143.6
Horse work	hours: <u>1/</u> 34.0		108.0	45.1
Tractor use	hour: -		.7	-
Plants	number: 2248		-	-
Manure	tons: 2.3		-	-

Data for Ohio from N. Y. Cornell Agr. Expt. Sta. Bull. 412; for Pennsylvania 1923 from Pa. State Col. Agr. School, Summary of Production Records in Lancaster County, 1923. Mimeo. r.; and 1924 from Pa. State Col. Agr. School, Summary of Cost of Production Records in Lancaster County, 1924. Mimeo. r. 1/ Pre-harvest.

Table 29. - Costs in Sumter County, South Carolina, 1932

Item	For manufacture		For market	
	Number		Number	
Records	-		-	
Acres, total	6.0		6.0	
	Dollars		Dollars	
Cost per acre	31.00		33.00	
Value of crop per acre	45.00		70.00	
Yield per acre	<u>1/</u> 3.0		<u>2/</u> 100	
Cost per unit	dollars: 10.33		.33	
Requirements per acre:				
Man labor	hours: 165		185	
Horse work	hours: 57		65	
Seed	pounds: 3		3	
Fertilizer	pounds: 600		600	

Data from S. C. Agr. Expt. Sta. Bull. 288.

1/ Tons. 2/ Crates.

TOMATOES: Cost data - South Carolina

Table 30. - Costs in selected areas

Item	: Anderson County : Allendale, Bamberg, : and Greenville : Barnwell, and Hampton : trade area : Counties : 1924 : 1/ 1929-1930	
	: Dollars : Dollars	
Cost per acre:		
Use of land (rental basis)	6.02	7.50
Man labor	38.24	27.75
Horse work	8.82	5.70
Tractor and car use	18.82	-
Use of equipment	.57	.86
Seed	3.00	10.50
Manure	7.06	-
Fertilizer	11.77	-
Ammoniates	.14	12.60
Dusts	.30	-
Spray material	1.45	-
Containers	13.82	-
Insurance	.22	-
Interest -		
Operating capital	1.53	2.36
Mules and equipment	.53	.75
Miscellaneous	-	1.00
Total cost	112.29	69.02
Value of crop per acre	143.36	66.00
Yield per acre	2/ 112	3/ 3
Cost per unit	dollars: 1.00	23.00
Requirements per acre:		
Man labor	hours: 192	185
Horse work	hours: 57	57
Tractor and car use	hours: 19	-
Seed	pounds: -	3
Manure	tons: 6.9	-
Fertilizer	pounds: 592	900
Containers	number: 661	-

Data for 1924 from S. C. Agr. Expt. Sta. Bull. 250; for 1929-30 from S. C. Agr. Expt. Sta. Circ. 45.

1/ For manufacture.

2/ Crates.

3/ Tons.

TOMATOES: Cost data - Texas

Table 31. - Yield and requirements per acre, Piney Woods area -

Item		Per acre
		Dollars
Cost per acre:		
Use of equipment		2.45
Materials for frames		3.25
Returns per acre		225.00
Yield per acre	tons:	3.75
Requirements per acre:		
Man labor	hours:	276
Horse work	hours:	136
Seed	pound:	.25
Fertilizer		
Cold frame	pounds:	100
Field, before planting	pounds:	400
Side dressing	pounds:	200
Labor and power requirements per acre, by operations:		
	Man labor	Horse work
	Hours	Hours
Hot bed labor -		
Building hot bed	10.0	5.0
Planting hot bed	5.0	-
Building cold frame	10.0	5.0
Planting cold frame	15.0	-
Preparing seed bed -		
Flat breaking seed bed	5.0	10.0
Bedding	4.0	8.0
Opening beds	2.0	2.0
Distributing fertilizer	2.5	2.5
Rebedding	4.0	4.0
Setting plants	25.0	12.5
Growing period -		
Sweeping up	16.0	16.0
Hoeing	10.0	10.0
Plowing middles	8.0	8.0
Distributing fertilizer	3.0	3.0
Setting stakes and pruning	30.0	10.0
Pruning	30.0	-
Miscellaneous labor	2.0	-
Picking	75.0	-
Hauling to market	20.0	40.0

Data from Texas Agr. Expt. Sta. Bull. 453, Sept., 1932.

TOMATOES: Cost data - Texas

Table 32. - Tomatoes for market, south and east Texas

Item	South		East	
	Cameron County		Cherokee and Smith Counties	
	1925-26	1926-27	1925-26	1926-27
	Number	Number	Number	Number
Records	32	33	34	34
Acres per record (harvested)	14.3	22.3	5.9	4.8
	Dollars	Dollars	Dollars	Dollars
Cost per acre:				
Use of land -				
Interest	18.07	20.88	3.10	3.12
Taxes	3.61	3.52	.71	.73
Man labor (includes contract)	33.22	22.71	46.31	51.10
Supervision	5.16	5.75	2.15	2.66
Horse work	4.49	4.62	7.00	9.00
Tractor and truck use	13.19	10.00	.59	1.52
Automobile	1.27	1.13	1.41	1.41
Use of equipment	2.68	2.43	4.10	4.04
Seeds	4.82	5.89	-	-
Plants	-	-	28.70	28.26
Manure (includes cover crop)	-	.01	.02	.28
Commercial fertilizer	2.99	5.25	19.04	18.46
Spray and poison	.47	.43	.45	.25
Irrigation	4.82	7.06	-	-
Interest (other than land)	1.70	1.53	1.57	1.82
Miscellaneous	1.36	1.52	4.67	3.65
Total cost <u>1/</u>	97.85	90.73	119.82	126.30
Less credits	.13	.26	-	.51
Net cost <u>1/</u>	97.72	90.47	119.82	125.79
Returns per acre	211.65	46.36	98.29	140.09
Yield per acre <u>1/</u> 100 pounds:	41.5	15.2	41.3	54.3
Cost per 100 pounds <u>2/</u> dollars:	2.34	5.97	2.90	2.32

Data from U. S. Tariff Comm. Fresh Tomatoes. Preliminary Statement of Information. Mimeogr.

1/ Per acre harvested.

2/ Per 100 pounds harvested.

TOMATOES: Cost data - Utah

Table 33. - Tomatoes for manufacture, Utah Lake Valley

Item	1913	1915
Records number:	3	5
Cost per acre:	Dollars	
Use of land (interest and taxes)	16.88	
Man labor	<u>1/</u> 50.14	
Horse work	10.88	
Use of equipment	3.91	
Plants	10.18	
Manure	.93	
Water for irrigating	3.26	
Crates	1.95	
Total cost	98.13	
Value of crop per acre	166.65	
Yield per acre	tons: 15.9	18.0
Cost per ton	dollars: 6.17	-
	Hours	Hours
Requirements per acre:		
Man labor	<u>2/</u> 197.8	336.1
Horse work	108.8	155.7
Labor and power requirements by operations:	Man labor : Horse work : Man labor : Horse work	
	Hours : Hours : Hours : Hours	
Manuring	1.8 : 3.5 :	13.5 : 27.0
Plowing	7.3 : 14.6 :	9.0 : 18.0
Cleaning ditches	- : - :	1.5 : -
Making hot bed	- : - :	4.5 : 1.8
Making cold frame	- : - :	4.5 : 1.8
Weeding and watering in frames	- : - :	9.0 : -
Fitting land	9.4 : 24.5 :	5.4 : 10.8
Furrowing	1.0 : 2.1 :	1.8 : 1.8
Transplanting and replanting	<u>2/</u> 11.2 : - :	19.1 : 9.0
Trenching	.8 : .8 :	- : -
Irrigating	11.3 : - :	9.0 : -
Cultivating	12.5 : 12.5 :	13.6 : 13.5
Hoeing	8.4 : - :	27.0 : -
Weeding	- : - :	2.2 : -
Bugging	1.7 : - :	- : -
Picking	<u>2/</u> 107.0 : - :	216.0 : 72.0
Hauling	25.4 : 50.8 :	

Data for 1913 from United States Department of Agriculture, Bulletin 117;
for 1915 from Utah Agr. Expt. Sta. Bull. 165.

1/ Includes approximately \$1.28 contract labor for transplanting and
\$9.30 for picking.

2/ Does not include contract labor.

TOMATOES: Cost data - Utah

Table 34. - Tomatoes for manufacture, Davis and Weber Counties

Item	Davis and Weber Counties, Ogden	
	1926	1927
	Number	Number
Records	32	32
Acres per record <u>1/</u>	3.7	5.1
	Dollars	Dollars
Cost per acre:		
Use of land -		
Interest	18.50	19.40
Taxes	3.76	4.08
Man labor <u>2/</u>	62.57	66.38
Contract labor	10.29	11.75
Horse work	14.73	14.94
Tractor and truck use	.81	.80
Use of equipment	5.21	5.22
Plants	13.42	14.34
Fertilizer	5.52	6.36
Irrigation	7.20	7.10
Containers	1.72	1.60
Interest	1.75	1.82
Miscellaneous	.74	1.25
Total cost	146.22	155.04
Less credits	-	.49
Net cost	146.22	154.55
Returns per acre	96.62	102.13
Yield per acre <u>3/</u>	tons: 9.63	9.25
Net cost per ton	dollars: 15.18	16.71

Data from U. S. Tariff Comm. Canned Tomatoes and Tomato Paste. Report to the President, 1926-1927.

1/ Acres harvested same as acres planted.

2/ Includes supervision.

3/ Per acre harvested.

TOMATOES: Cost data - Virginia

Table 35. - Tomatoes for manufacture, selected counties, 1932-33

Item	1932		1933					
	Lancaster	Bedford and	Lancaster	Shenandoah	Westmoreland	Aver-		
	and West-	Botetourt	Essex	doah and	moreland	Aver-		
	moreland	Counties	County	County	Page	County	age	
	Counties			Counties				
	Number	Number	Number	Number	Number	Number	Number	
Records	63	29	17	41	27	40	154	
Acres per record	3.6	3.7	3.1	3.7	5.0	3.8	3.9	
	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	Dolls.	
Cost per acre:								
Use of land	3.19	4.08	3.03	3.32	4.58	3.26	3.70	
Man labor	6.51	12.97	6.92	6.14	12.68	6.98	9.12	
Horse work	3.99	5.43	3.34	3.05	3.71	4.20	3.94	
Truck use	.17	.12	.53	.01	-	.05	.08	
Tractor use	.37	.02	.08	.55	.08	.11	.20	
Use of equipment	.50	.51	.52	.43	.45	.50	.47	
Seed	.79	.60	.67	.87	.71	1.43	.91	
Plants	.38	.02	.16	.06	.12	.11	.09	
Manure	2.68	.84	2.70	2.63	1.36	3.25	2.19	
Fertilizer	7.27	3.41	6.88	7.76	3.02	4.75	5.07	
Lime	.02	.01	.06	.11	-	.04	.05	
Spray and dust	.17	-	.04	.05	.04	.11	.06	
Contract picking	4.55	2.22	2.52	2.96	2.34	2.41	2.51	
Contract hauling	2.62	1.12	1.81	2.79	.39	1.98	1.65	
Interest	.36	.33	.30	.29	.34	.27	.30	
Total cost	1/ 33.57	31.68	29.56	31.02	29.82	29.45	30.34	
Value of crop per acre	41.01	47.39	27.32	38.76	32.07	38.97	37.82	
Yield per acre-baskets	2/ 308.5	290.2	207.0	187.1	209.0	210.6	223.2	
Cost per basket dollar	.105	.109	.143	.150	.143	.140	.136	
Requirements per acre:								
Man labor hours	3/ 62.2	94.6	67.8	60.9	90.4	68.3	76.1	
Horse work hours	3/ 52.8	61.9	45.3	39.7	48.0	56.4	50.3	
Fertilizer pounds	636	331	594	713	314	536	499	

Data for 1932 from Va. Polytech. Inst. Agr. Econ. and Rural Social.

Farm Econ. No. 21, June 1933; for 1933 from Va. Polytech. Inst.

Dept. Agr. Econ. and Rural Social. Farm Econ. No. 29, Apr., 1934.

1/Plants were sold to the value of \$1.07; when deducted from the gross cost, the net cost of \$32.50 remains.

2/Baskets of 5/8 bushel.

3/Does not include contract labor for picking and hauling.

TOMATOES: Cost data - Virginia

Table 36. - Tomatoes for manufacture, selected counties, 1934

Item	: Bedford :	: and :Essex and:	: Shenandoah:Westmore-:	: Botetourt:Richmond :Lancaster: and Page :	: land :	: State
	: Counties :	: Counties :	: County :	: Counties :	: County :	:
	: Number :	: Number :	: Number :	: Number :	: Number :	: Number
Records	: 35 :	: 41 :	: 54 :	: 33 :	: 48 :	: 211
Acres per record	: 3.4 :	: 3.5 :	: 3.6 :	: 3.4 :	: 5.0 :	: 3.8
	: Dollars :	: Dollars :	: Dollars :	: Dollars :	: Dollars :	: Dollars
Cost per acre:	:	:	:	:	:	:
Use of land	: 3.77 :	: 3.77 :	: 3.40 :	: 4.27 :	: 3.23 :	: 3.58
Man labor	: 11.98 :	: 7.57 :	: 7.07 :	: 9.11 :	: 7.08 :	: 8.17
Horse work	: 4.99 :	: 3.84 :	: 3.77 :	: 4.72 :	: 3.99 :	: 4.16
Truck use	: .02 :	: .12 :	: .04 :	: .01 :	: .03 :	: .04
Tractor use	: - :	: .27 :	: .46 :	: .22 :	: .17 :	: .23
Use of equipment	: .50 :	: .50 :	: .50 :	: .50 :	: .50 :	: .50
Seed	: .75 :	: 1.02 :	: 1.26 :	: .30 :	: 1.03 :	: .94
Plants	: .39 :	: .13 :	: .60 :	: 1.60 :	: .21 :	: .51
Manure	: .60 :	: 4.37 :	: 3.08 :	: 2.67 :	: 1.95 :	: 2.55
Fertilizer	: 4.10 :	: 6.87 :	: 9.05 :	: 4.21 :	: 5.52 :	: 6.21
Lime	: - :	: .02 :	: - :	: .01 :	: .03 :	: .02
Spray and dust	: - :	: .16 :	: .25 :	: .09 :	: .19 :	: .16
Contract picking	: 5.32 :	: 5.52 :	: 4.99 :	: 8.16 :	: 3.96 :	: 5.27
Contract hauling	: 2.31 :	: 3.12 :	: 1.91 :	: 3.30 :	: 3.15 :	: 2.75
Interest	: .23 :	: .24 :	: .24 :	: .28 :	: .22 :	: .24
Total cost	: 35.01 :	: 37.52 :	: 36.62 :	: 39.45 :	: 31.26 :	: 35.33
Value of crop per acre	: 40.38 :	: 49.88 :	: 53.98 :	: 45.27 :	: 38.15 :	: 45.30
Yield per acre-baskets ^{1/}	: 227.8 :	: 276.0 :	: 245.8 :	: 289.4 :	: 173.2 :	: 232.8
Cost per basket dollar:	: .154 :	: .136 :	: .149 :	: .136 :	: .180 :	: .152
Requirements per acre:	:	:	:	:	:	:
Man labor	hours: 86.8 :	: 60.8 :	: 56.4 :	: 2/ 61.5 :	: 51.0 :	: 60.8
Horse work	hours: 56.8 :	: 50.0 :	: 43.2 :	: 2/ 48.0 :	: 51.2 :	: 49.5
Fertilizer	pounds: 334 :	: 568 :	: 688 :	: 362 :	: 507 :	: 515

Data from Va. Polytech. Inst. Dept. Agr. Econ. and Rural Sociol. Farm Econ.
No. 33, Feb., 1935.

^{1/} Baskets of 5/8 bushel.

^{2/} Does not include contract labor for picking and hauling.

TOMATOES: Cost data - Washington

Table 37. - Tomatoes for market, irrigated land

Item		Spokane Valley	
		1925	
		Number	
Records		12	
Acres per record		1.1	
		Dollars	
Cost per acre:			
Use of land (taxes)		3.94	
Man labor		43.16	
Horse work and tractor use		11.13	
Use of equipment		2.63	
Seed or plants		22.44	
Fertilizer		29.19	
Spray material		1.39	
Irrigation (water tax)		10.50	
Harvesting cost		247.14	
Interest on working capital		11.15	
Total cost		382.67	
Yield per acre	crates:	1373.	
Cost per crate	dollar:	.28	
		Hours	
Requirements per acre:			
Man labor		485	
		Hours	
Preharvest requirements			
per acre, by operations:			
Fertilizing		16.5	
Preparing land		20.3	
Planting		25.7	
Growing		30.9	
Irrigating		27.2	
Spraying		5.0	
Total		125.6	

Data from Wash. Agr. Expt. Sta. Bull. 221.

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